

## **Department of Energy**

Washington, DC 20585

October 26, 2010

We would like to invite you to participate in a workshop "Large Scale Production Computing and Storage Requirements for Advanced Scientific Computing Research" on January 5 and 6, 2011, using a combination of web-based and local arrangements. The workshop will run for up to 8 hours on Day 1, followed by a few hours on Day 2. On Day 1, there will be presentations on NERSC resources and future plans and ASCR priority research areas, and discussions on the priority areas and anticipated needs for NERSC resources. On Day 2, NERSC staff will present a summary of preliminary findings from Day 1 as a starting point for active discussions and corrections/additions by the participants. Although no travel will be involved for most participants, we would like your full attention for the duration of the workshop.

This workshop is organized by the Department of Energy's Advanced Scientific Computing Research (ASCR) and the National Energy Research Scientific Computing Center (NERSC). The workshop's goal is to characterize ASCR production computing requirements over the next 5 years at NERSC. NERSC is the principal provider of production High Performance Computing (HPC) facilities and services for the Office of Science (SC). The mission of NERSC is to accelerate the pace of scientific discovery by providing computing, information, data, and communications services for research sponsored by SC. NERSC supports the largest and most diverse research community of any computing facility within DOE.

Requirements collected at the workshop will help NERSC plan for future systems and services, and will help ensure that NERSC continues to provide world-class support for scientific discovery. The tangible outcome of the workshop will be a report that includes both the HPC requirements and a supporting narrative.

The workshop will be conducted following a framework developed by ESnet, which has conducted similar successful requirements-gathering workshops with the SC program offices. Designated SC program managers, the NERSC program manager, and NERSC personnel have tailored the workshop format and process to meet SC/NERSC-specific needs.

The workshop is by invitation only. We will ask for a small number of case studies, which should address current bottlenecks and future requirements, to be presented. We expect this to stimulate discussion from the whole group, followed by breakouts.

Detailed information and reference materials will be available at the workshop web site: http://www.nersc.gov/projects/science\_requirements/ASCR.

Please respond to the workshop organizing committee (ASCR-workshop-committee@nersc.gov), confirming your attendance no later than November 21, 2010.

We believe this workshop will help NERSC maintain its reputation as the flagship production computing facility for SC and provide world-class resources for basic energy science research over the next decade. Thank you again for your participation.

Sincerely,

Daniel A. Hitchcock

Acting Associate Director of Science for the Office of Advanced Scientific Computing Research